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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,530	07/03/2003	Claus Hoffjann	4538	4543

21553 7590 05/04/2005

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EXAMINER
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SAVAGE, MATTHEW O

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/613,530

Applicant(s)

HOFFJANN ET AL.

Examiner

Matthew O. Savage

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.  
4a) Of the above claim(s) 12-14, 17 and 19-25 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1, 2, 6-10, 15, 16, 18, 26 and 27 is/are rejected.  
7) ☒ Claim(s) 3-5 and 11 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

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Applicant's election with traverse of group I, species L4, and species P2 in the reply filed on 2-28-05 is acknowledged. The traversal is on the ground(s) that the method of claim 1 could not be practiced by an apparatus that was materially different from the apparatus of claim 19. This is not found persuasive since the subject matter of all of the claims of each respective group is combined into a respective whole for restriction purposes.

The requirement is still deemed proper and is therefore made FINAL.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-11, 15, 16, 18, 26, and 27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

With respect to claim 1, the step of "anodically oxidizing" has not been adequately disclosed in the specification.

Concerning claim 16, the step of controlling the temperature of the water has not been adequately disclosed in the specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 15 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 15, it is unclear as to which functions, status, characteristics, and operations of claim 1, "all system functions, status, characteristics and operations" implies.

Concerning claim 16, it is unclear as to how the temperature of the water flowing through the faucet is changed since no means for heating or cooling the water has been specified in the claim. On line 4, "said lavatory" lacks antecedent basis.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 6-10, 15, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rozenblatt et al in view of Almon or Beer.

With respect to claim 1, Rozenblatt et al disclose a method of processing and reusing gray water for flushing a toilet including filtering the gray water to provide filtered water (e.g., via filter 42 shown in FIG. 1), collecting the filtered water in a processing tank 16, and using the filtered water for flushing the toilet bowl 18 in a toilet. Rozenblatt et al fail to specify processing the filtered water by anodically oxidizing filtered water in

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the processing tank to provided processed water. Almon and Beer discloses methods of anodically oxidizing filtered water in a toilet tank and suggests that such water maintains the toilet bowl in a sanitary condition. It would have been obvious to have modified the method of Rozenblatt et al so as to have included the step of anodically oxidizing filter water in a tank as suggested by Almon or Beer in order to maintain the toilet bowl in a sanitary condition.

Concerning claim 6, Almon and Beer disclose preventing germ growth in and on any component a water distribution system through which the processed water is distributed (e.g., a water distribution of a toilet).

Regarding claim 7, Rozenblatt et al disclose detecting through a sensor 48 at least one filling level in the processing tank 16 to produce a control signal for controlling a water flow.

Concerning claim 8, Rozenblatt et al disclose providing an overflow discharge (e.g., an open top of conduit 44) in the processing tank 16 and feeding the overflow discharge into a gray water collecting conduit 46.

As to claim 9, Rozenblatt et al leading the gray water collecting conduit to an outboard draining mast 46.

Regarding claim 10, Rozenblatt et al disclose the step of leading the gray water collecting conduit 46 into a gray water collecting chamber 47.

As to claim 15, Rozenblatt et al disclose a central processing unit 180.

As to claim 26, Rozenblatt et al disclose the gray water collecting container 47 as being located near a waste water collecting tank (e.g., described in the third paragraph of col. 4) since both elements are located below the floor 26 of the aircraft).

Claims 1, 6, 7, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ask et al in view of Almon or Beer.

With respect to claim 1, Ask et al disclose a method of processing and reusing gray water for flushing a toilet including filtering the gray water to provide filtered water (e.g., via filter 106 shown in FIG. 1), collecting the filtered water in a processing tank 62, and using the filtered water for flushing the toilet bowl 2 in a toilet. Ask et al fail to specify processing the filtered water by anodically oxidizing filtered water in the processing tank to provided processed water. Almon and Beer discloses methods of anodically oxidizing filtered water in a toilet tank and suggests that such water maintains the toilet bowl in a sanitary condition. It would have been obvious to have modified the method of Ask et al so as to have included the step of anodically oxidizing filter water in a tank as suggested by Almon or Beer in order to maintain the toilet bowl in a sanitary condition.

Concerning claim 6, Almon and Beer disclose preventing germ growth in and on any component a water distribution system through which the processed water is distributed (e.g., a water distribution of a toilet).

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Regarding claim 7, Ask et al disclose detecting through a sensor 91 at least one filling level in the processing tank 62 to produce a control signal for controlling a water flow.

As to claim 15, Ask et al disclose a central processing unit 180.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ask et al in view of Almon or Beer as applied to claim 1 above, and further in view of Jennings et al.

With respect to claim 2, Ask et al, Almon, and Beer fail to specify coarse and fine filtering steps. Jennings et al disclose coarse and fine filtering steps 5, 8 and suggest that such steps provide sufficiently clean water for flushing a toilet. It would have been obvious to have modified the combination suggested by Ask et al, Almon, or Beer so as to have included fine and coarse filtering steps as suggested by Jennings et al in order to provide sufficiently clean water for flushing a toilet.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rozenblatt et al in view of Almon or Beer as applied to claim 1 above, and further in view of Jennings et al.

With respect to claim 2, Rozenblatt et al, Almon, and Beer fail to specify coarse and fine filtering steps. Jennings et al disclose coarse and fine filtering steps 5, 8 and suggest that such steps provide sufficiently clean water for flushing a toilet. It would have been obvious to have modified the combination suggested by Rozenblatt et al,

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Almon, or Beer so as to have included fine and coarse filtering steps as suggested by Jennings et al in order to provide sufficiently clean water for flushing a toilet.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ask et al in view of Almon or Beer as applied to claim 15 above, and further in view of Eastep.

With respect to claim 16, Ask et al, Almon, and Beer fail to specify presetting in the central processing unit a defined temperature range for water passing through the faucet. Eastep discloses the concept of presetting in a central processing unit a defined temperature range for water passing through the faucet and suggests that such an arrangement provides accurate control of the water passing through the faucet. It would have been obvious to have modified the combination of Ask et al, Almon or Beer so as to have included the step of presetting a defined temperature range for water passing through the faucet as suggested by Eastep in order to provide accurate control of the water temperature passing through the faucet.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ask et al in view of Almon or Beer as applied to claim 1 above, and further in view of McIntosh.

With respect to claim 18, Ask et al discloses sensing a filling level (e.g., via sensor 91) to produce filling level control signals for controlling a fresh water supply through a faucet 42 and a lavatory basin 40 so that a larger fresh water volume is supplied into the processing tank through the faucet and lavatory basin in response to the filling level. Ask et al, Almon, and Beer fail to specify a high and low filling level.



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McIntosh disclose a gray water tank 16 including high filling level S3 and a low filling level S2 such that a larger fresh water volume is supplied into the tank in response to the low filling level signal and a smaller fresh water volume is supplied into the processing tank in response to the high level signal and suggests that such an arrangement maintains an adequate supply of water within the tank to flush a toilet. It would have been obvious to have modified the combination suggested by Ask et al, Almon or Beer so as to have included the high and low water filling levels as suggested by Ask et al in order to maintain an adequate supply of water within the tank to flush a toilet.

As to claim 27, McIntosh et al disclose starting replenishing water in the processing tank in response to the low filling level signal and stopping the replenishing in response to the high filling level control signal when the processing tank reaches the high filling level (see the second full paragraph of col. 9).

Claims 3-5, and 11 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

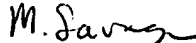
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew O. Savage whose telephone number is (571) 272-1146. The examiner can normally be reached on Monday-Friday, 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Matthew O Savage  
Primary Examiner  
Art Unit 1724

mos  
April 29, 2005